



Whirling of bone implants with large variances in depth of cut The solution for bone implants with larger heads!

Thread whirling with Schwanog is a proven and reliable solution to machine threads. The usual depth of cut of the whirling inserts is approximately 3.5 mm which means when using a 12 mm stock, we are able to remove material up to a screw core (minor-Ø) of 5 mm.

There are more and more implants on the market with a very large and elaborate head design but with a relatively small bone thread.



Challenge:

In the current example, the implant head has an OD of 11.8 mm, and a core (minor) diameter at the thread of 2.853 mm. The depth of cut using a 12 mm stock results in 4.573 mm and therefore falls out of our whirling inserts depth ratio, unable to reach the core diameter of 2.853 mm.

Solution:

The technical challenge was to achieve this depth of cut with a cutter body suitable for the existing whirling attachment. Schwanog engineers found a solution in which the whirling inserts are positioned onto two different diameters. Three of the six inserts are used to whirl the raw material until obtaining a defined preliminary diameter while the other three inserts are finishing the major and minor diameters.

Use our potential. Challenge us!